

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT



APPLICATION FOR PERMIT TO DRILL		1. WELL NAME and NUMBER SRW 823-21K4BS
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		3. FIELD OR WILDCAT NATURAL BUTTES
4. TYPE OF WELL Gas Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>		5. UNIT or COMMUNITIZATION AGREEMENT NAME SOUTH RED WASH
6. NAME OF OPERATOR KERR-MCGEE OIL & GAS ONSHORE, L.P.		7. OPERATOR PHONE 720 929-6100
8. ADDRESS OF OPERATOR P.O. Box 173779, Denver, CO, 80217		9. OPERATOR E-MAIL Andy.Lytle@anadarko.com
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU061396	11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		
13. NAME OF SURFACE OWNER (if box 12 = 'fee')		14. SURFACE OWNER PHONE (if box 12 = 'fee')
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')		16. SURFACE OWNER E-MAIL (if box 12 = 'fee')
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')	18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>	
19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>		

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1548 FSL 2252 FEL	NWSE	21	8.0 S	23.0 E	S
Top of Uppermost Producing Zone	1822 FSL 2139 FWL	NESW	21	8.0 S	23.0 E	S
At Total Depth	1822 FSL 2139 FWL	NESW	21	8.0 S	23.0 E	S

21. COUNTY UINTAH	22. DISTANCE TO NEAREST LEASE LINE (Feet) 505	23. NUMBER OF ACRES IN DRILLING UNIT 1581
	25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 3941	26. PROPOSED DEPTH MD: 11977 TVD: 11900
27. ELEVATION - GROUND LEVEL 5241	28. BOND NUMBER WYB000291	29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8496

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	11	8.625	0 - 3780	28.0	J-55 LT&C	0.2	Type V	180	1.15	15.8
							Class G	270	1.15	15.8
PROD	7.875	4.5	0 - 11977	11.6	HCP-110 LT&C	12.5	Premium Lite High Strength	390	3.38	12.0
							50/50 Poz	1620	1.31	14.3

ATTACHMENTS

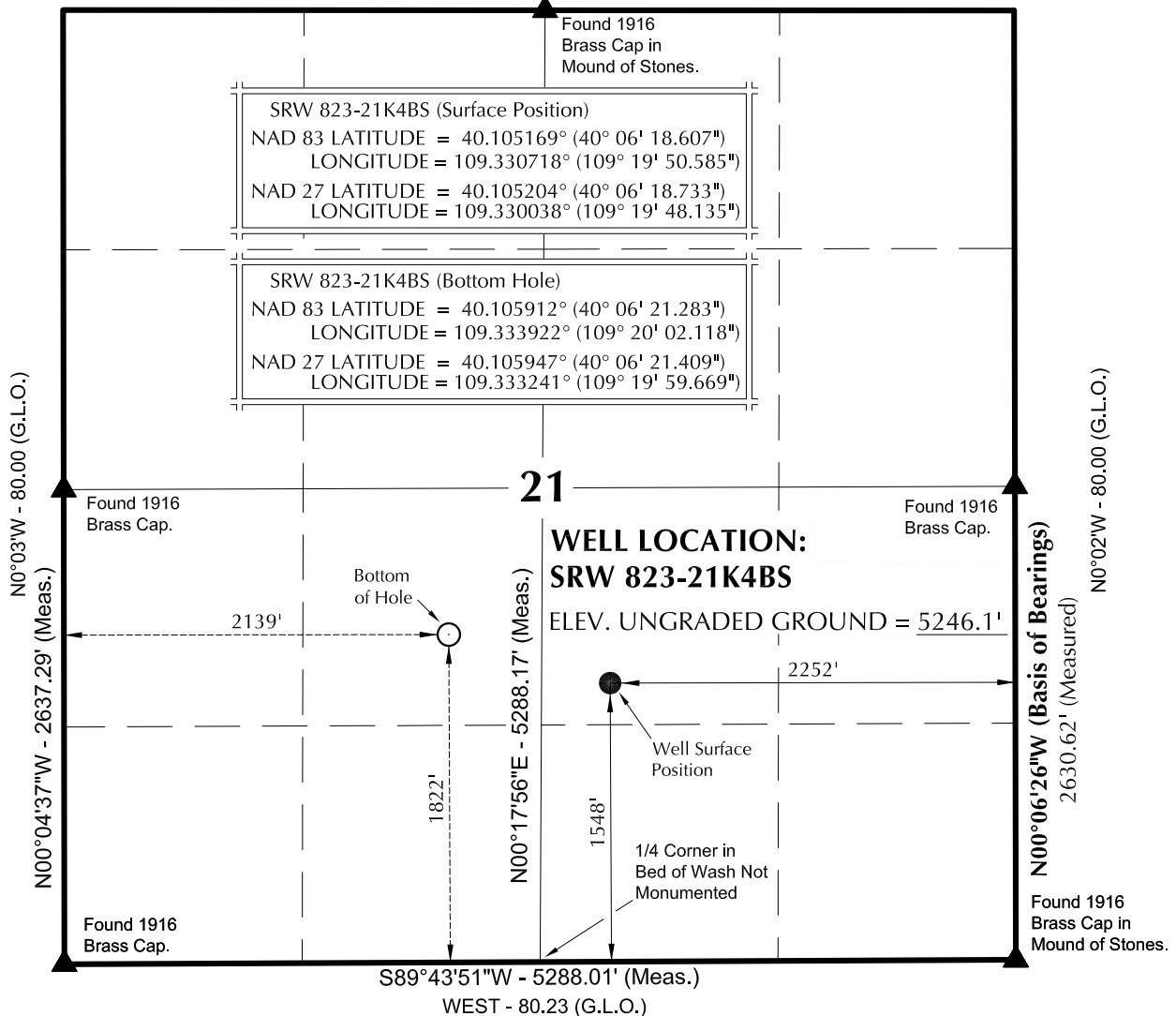
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

NAME Joel Malefyt	TITLE Regulatory Analyst	PHONE 720 929-6828
SIGNATURE	DATE 12/11/2014	EMAIL joel.malefyt@anadarko.com
API NUMBER ASSIGNED 43047551150000	APPROVAL Permit Manager	

T8S, R23E, S.L.B.&M.

N89°54'W - 80.22 (G.L.O.)



NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines. G.L.O. distances are shown in feet or chains.
2. 1 chain = 66 feet.
3. The Bottom of hole bears N73°16'33"W 936.46' from the Surface Position.
4. NAD 83 Latitude & Longitude are (CORS 96)(EPOCH:2002).
5. Bearings and Distances are based upon a Local Cartesian Grid, oriented to Geodetic North at the North 1/4 Corner of Section 8, T10S, R22E, S.L.B.&M. The Grid having a mean project height of 5300'. Lineal units used are U.S. Survey Foot.
6. Basis of elevation is Tri-Sta "Two Water" located in Lot 4 of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

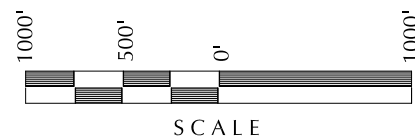
WELL PAD - SRW 823-21J

SRW 823-21K4BS
WELL PLAT

1822' FSL, 2139' FWL (Bottom Hole)
NE $\frac{1}{4}$ SW $\frac{1}{4}$ OF SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182



SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 3-25-13	SURVEYED BY: J.W.	SHEET NO: 1 1 OF 13
DATE DRAWN: 3-27-13	DRAWN BY: C.T.C.	
SCALE: 1" = 1000'	Date Last Revised:	

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – SRW 823-21J
WELL – SRW 823-21K4BS
Section 21, T8S, R23E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah, proceed in an easterly, then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 24.2 miles to the junction of Kennedy Wash Road (Class D County Road) to the southwest. Exit right and proceed in a southwesterly direction along Kennedy Wash Road approximately 3.6 miles to the proposed access road to the northwest. Exit right and follow the road flags in a westerly direction approximately 4,525 feet to the proposed well location.

Total distance from Vernal, Utah to the proposed well location is approximately 32.0 miles in a southerly direction.

Kerr-McGee Oil & Gas Onshore. L.P.**SRW 823-21K4BS**

Surface:	1548 FSL / 2252 FEL	NWSE
BHL:	1822 FSL / 2139 FWL	NESW

Section 21 T8S R23E

Uintah County, Utah
Mineral Lease: UTU-73021**ONSHORE ORDER NO. 1****DRILLING PROGRAM**

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	2,615'	
Birds Nest	2,882'	Water
Mahogany	3,328'	Water
Wasatch	5,600'	Gas
Mesaverde	7,771'	Gas
Sego	10,060'	Gas
TVD	10,060'	
TD	10,137'	

3. **Pressure Control Equipment**

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 10060' TVD, approximately equals
6,137 psi (0.61 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,950 psi (bottom hole pressure
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press. (MASP) = (Pore Pressure at next csg point -
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the Standard Operating Practices on file with the BLM Vernal Field Office.

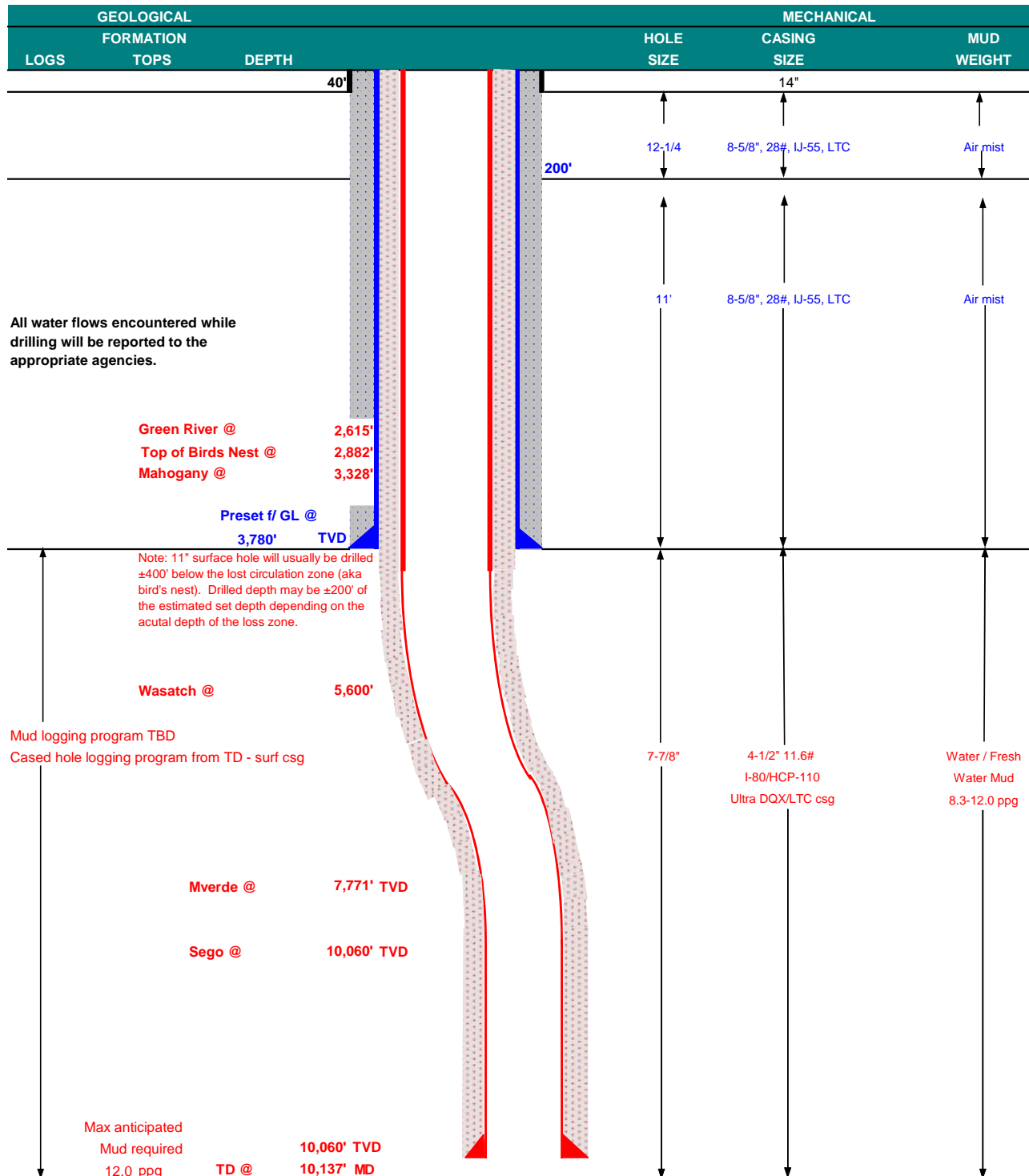
10. Other Information:

Please refer to the attached Drilling Program.



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP			DATE	May 14, 2013		
WELL NAME	SRW 823-21K4BS			TD	10,060'	TVD	10,137' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	5,241'
SURFACE LOCATION	NWSE	1548 FSL	2252 FEL	Sec 21	T 8S	R 23E	
	Latitude:	40.105169	Longitude:	-109.330718			NAD 83
BTM HOLE LOCATION	NESW	1822 FSL	2139 FWL	Sec 21	T 8S	R 23E	
	Latitude:	40.105912	Longitude:	-109.333922			NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.						





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						LTC		DQX	
						BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'							
						3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 3,780	28.00	IJ-55	LTC	1.43	1.06	3.75	N/A
						7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	1.01		2.78
						10,690	8,650	279,000	367,174
	4-1/2"	5,000 to 10,137'	11.60	HCP-110	LTC	1.11	1.01	4.58	

Surface Casing:

(Burst Assumptions: TD = 12.0 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.61 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT		YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
			+ 2% CaCl + 0.25 pps flocele					
SURFACE		NOTE: If well will circulate water to surface, option 2 will be utilized						
Option 2	LEAD	3,280'	65/35 Poz + 6% Gel + 10 pps gilsonite	300	35%	11.00		3.82
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION	LEAD	5,097'	Premium Lite II +0.25 pps celloflake + .4% FL-52	390	35%	12.00		3.38
			+ .3% R-3 + .5 lbs/sk Kol-Seal + 6%Bentonite II +					
			1.2% Sodium Metasilicate + .05 lbs/sk Static Free					
	TAIL	5,040'	50/50 Poz/G + 10% salt + .05 lbs/sk Static Free	1,190	35%	14.30		1.31
			+ 1.2% Sodium Metasilicate + .5 % EC-1					
			+ .002 gps FP-6L + 2% Bentonite II					

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

If extreme mud losses are observed OR cement doesn't reach surface on a well on the pad, a DV Tool may be used. With Cement Baskets above and Below it.

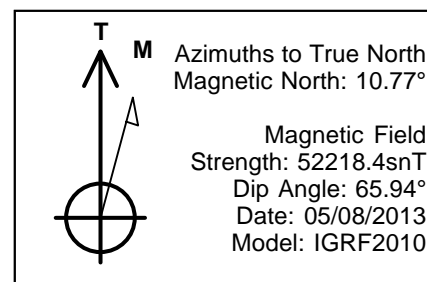
DRILLING ENGINEER:

Nick Spence / John Tuckwiller / Brian Cocchiere / Tyler Elliott

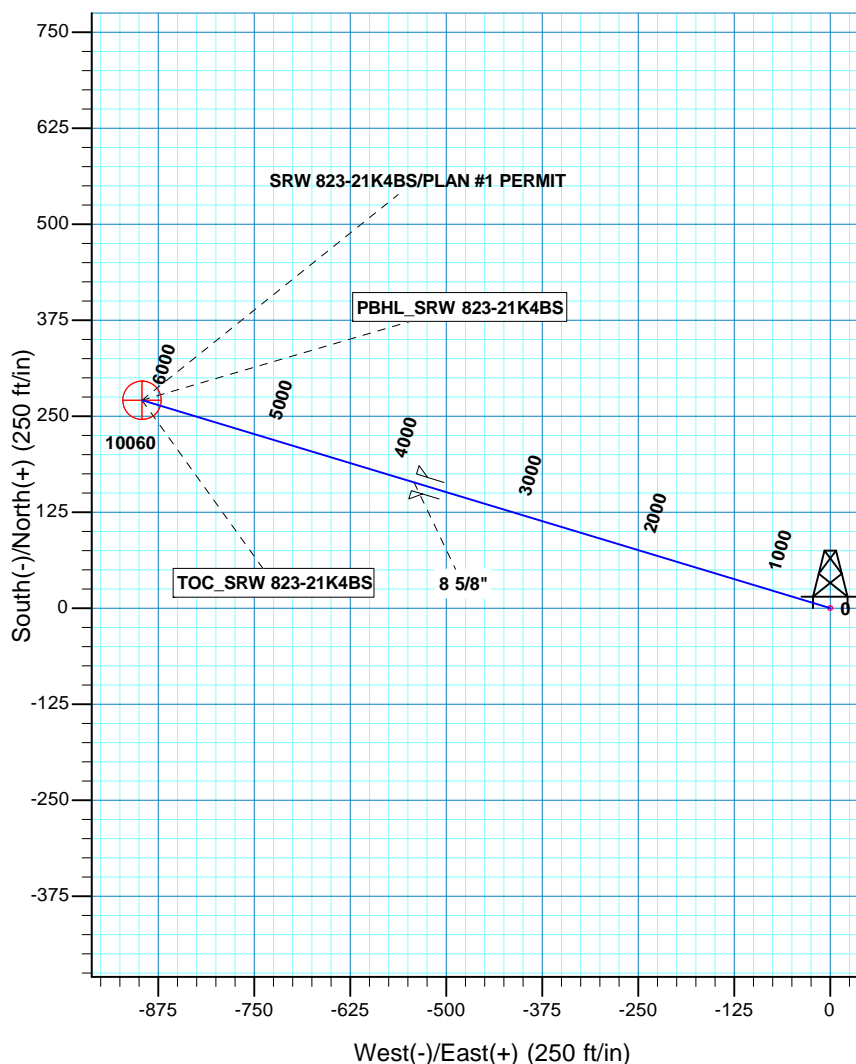
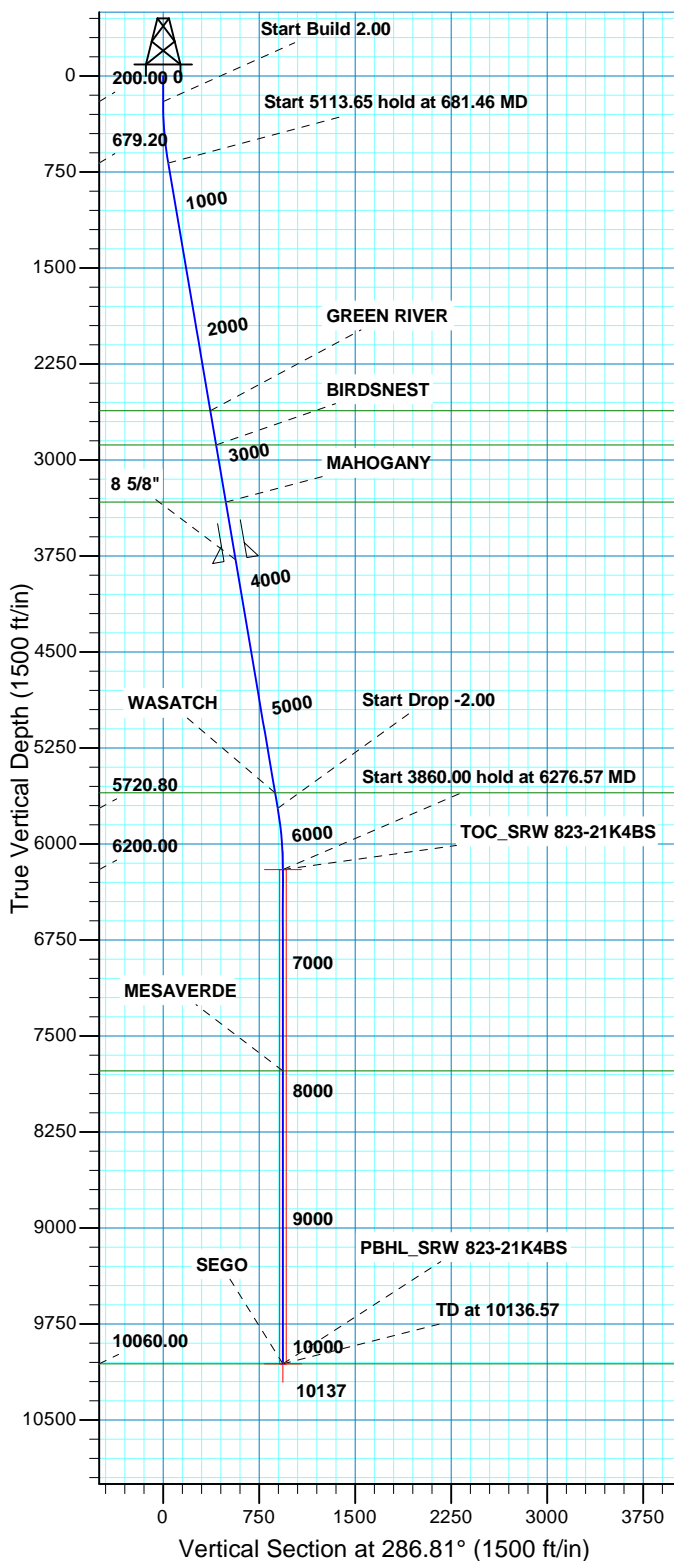
DATE:**DRILLING SUPERINTENDENT:**

Lovel Young

DATE:



WELL DETAILS: SRW 823-21K4BS						
GL 5246 & KB 4 @ 5250.00ft (ASSUMED)						
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
	0.00	0.00	14568737.73	2107396.40	40.105204	-109.330038
DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
TOC	6200.00	270.64	-896.12	14568991.49	2106495.36	40.105947
- plan hits target center						
PBHL	10060.00	270.64	-896.12	14568991.49	2106495.36	40.105947
- plan hits target center						
						Shape
						Point
						Circle (Radius: 25.00)



SECTION DETAILS										
	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
	681.46	9.63	286.81	679.20	11.67	-38.64	2.00	286.81	40.36	
	5795.11	9.63	286.81	5720.80	258.97	-857.48	0.00	0.00	895.73	
	6276.57	0.00	0.00	6200.00	270.64	-896.12	2.00	180.00	936.09	TOC SRW 823-21K4BS
	10136.57	0.00	0.00	10060.00	270.64	-896.12	0.00	0.00	936.09	PBHL SRW 823-21K4BS
FORMATION TOP DETAILS										
PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N Geodetic System: Universal Transverse Mercator (US Survey Feet) Datum: NAD 1927 (NADCON CONUS) Ellipsoid: Clarke 1866 Zone: Zone 12N (114 W to 108 W) Location: SECTION21 T10S R23E System Datum: Mean Sea Level						TVDPath		MDPath		Formation
						2615.00		2644.93		GREEN RIVER
						2882.00		2915.74		BIRDSNEST
						3328.00		3368.12		MAHOGANY
						5600.00		5672.58		WASATCH
						7771.00		7847.57		MESAVARDE
						10060.00		10136.57		SEGO
CASING DETAILS										
			TVD		MD		Name	Size		
			3778.00		3824.55		8 5/8"	8.625		



Scientific Drilling

US ROCKIES REGION PLANNING

**UTAH - UTM (feet), NAD27, Zone 12N
SOUTH RED WASH UNIT 823-21K4BS
SRW 823-21K4BS**

OH

Plan: PLAN #1 PERMIT

Standard Planning Report

09 May, 2013

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SRW 823-21K4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Site:	SOUTH RED WASH UNIT 823-21K4BS	North Reference:	True
Well:	SRW 823-21K4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PERMIT		

Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	SOUTH RED WASH UNIT 823-21K4BS, SECTION 21 T10S R23E			
Site Position:		Northing:	14,568,737.73 usft	Latitude: 40.105204
From:	Lat/Long	Easting:	2,107,396.39 usft	Longitude: -109.330038
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence: 1.08 °

Well	SRW 823-21K4BS, 1548 FSL 2252 FEL			
Well Position	+N/-S	0.00 ft	Northing:	14,568,737.73 usft
	+E/-W	0.00 ft	Easting:	2,107,396.39 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 5,246.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	05/08/13	10.77	65.94	52,218

Design	PLAN #1 PERMIT			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	286.81

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
681.46	9.63	286.81	679.20	11.67	-38.64	2.00	2.00	0.00	286.81	
5,795.11	9.63	286.81	5,720.80	258.97	-857.48	0.00	0.00	0.00	0.00	
6,276.57	0.00	0.00	6,200.00	270.64	-896.12	2.00	-2.00	0.00	180.00	TOC_SRW 823-21K4
10,136.57	0.00	0.00	10,060.00	270.64	-896.12	0.00	0.00	0.00	0.00	PBHL_SRW 823-21K

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SRW 823-21K4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Site:	SOUTH RED WASH UNIT 823-21K4BS	North Reference:	True
Well:	SRW 823-21K4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PERMIT		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
300.00	2.00	286.81	299.98	0.50	-1.67	1.75	2.00	2.00	0.00
400.00	4.00	286.81	399.84	2.02	-6.68	6.98	2.00	2.00	0.00
500.00	6.00	286.81	499.45	4.54	-15.02	15.69	2.00	2.00	0.00
600.00	8.00	286.81	598.70	8.06	-26.69	27.88	2.00	2.00	0.00
681.46	9.63	286.81	679.20	11.67	-38.64	40.36	2.00	2.00	0.00
Start 5113.65 hold at 681.46 MD									
700.00	9.63	286.81	697.48	12.57	-41.61	43.46	0.00	0.00	0.00
800.00	9.63	286.81	796.07	17.40	-57.62	60.19	0.00	0.00	0.00
900.00	9.63	286.81	894.66	22.24	-73.63	76.92	0.00	0.00	0.00
1,000.00	9.63	286.81	993.25	27.07	-89.65	93.64	0.00	0.00	0.00
1,100.00	9.63	286.81	1,091.84	31.91	-105.66	110.37	0.00	0.00	0.00
1,200.00	9.63	286.81	1,190.43	36.75	-121.67	127.10	0.00	0.00	0.00
1,300.00	9.63	286.81	1,289.02	41.58	-137.68	143.83	0.00	0.00	0.00
1,400.00	9.63	286.81	1,387.61	46.42	-153.70	160.55	0.00	0.00	0.00
1,500.00	9.63	286.81	1,486.20	51.26	-169.71	177.28	0.00	0.00	0.00
1,600.00	9.63	286.81	1,584.80	56.09	-185.72	194.01	0.00	0.00	0.00
1,700.00	9.63	286.81	1,683.39	60.93	-201.74	210.73	0.00	0.00	0.00
1,800.00	9.63	286.81	1,781.98	65.76	-217.75	227.46	0.00	0.00	0.00
1,900.00	9.63	286.81	1,880.57	70.60	-233.76	244.19	0.00	0.00	0.00
2,000.00	9.63	286.81	1,979.16	75.44	-249.77	260.92	0.00	0.00	0.00
2,100.00	9.63	286.81	2,077.75	80.27	-265.79	277.64	0.00	0.00	0.00
2,200.00	9.63	286.81	2,176.34	85.11	-281.80	294.37	0.00	0.00	0.00
2,300.00	9.63	286.81	2,274.93	89.94	-297.81	311.10	0.00	0.00	0.00
2,400.00	9.63	286.81	2,373.52	94.78	-313.82	327.82	0.00	0.00	0.00
2,500.00	9.63	286.81	2,472.12	99.62	-329.84	344.55	0.00	0.00	0.00
2,600.00	9.63	286.81	2,570.71	104.45	-345.85	361.28	0.00	0.00	0.00
2,644.93	9.63	286.81	2,615.00	106.63	-353.04	368.79	0.00	0.00	0.00
GREEN RIVER									
2,700.00	9.63	286.81	2,669.30	109.29	-361.86	378.01	0.00	0.00	0.00
2,800.00	9.63	286.81	2,767.89	114.12	-377.88	394.73	0.00	0.00	0.00
2,900.00	9.63	286.81	2,866.48	118.96	-393.89	411.46	0.00	0.00	0.00
2,915.74	9.63	286.81	2,882.00	119.72	-396.41	414.09	0.00	0.00	0.00
BIRDSNEST									
3,000.00	9.63	286.81	2,965.07	123.80	-409.90	428.19	0.00	0.00	0.00
3,100.00	9.63	286.81	3,063.66	128.63	-425.91	444.91	0.00	0.00	0.00
3,200.00	9.63	286.81	3,162.25	133.47	-441.93	461.64	0.00	0.00	0.00
3,300.00	9.63	286.81	3,260.84	138.31	-457.94	478.37	0.00	0.00	0.00
3,368.12	9.63	286.81	3,328.00	141.60	-468.85	489.76	0.00	0.00	0.00
MAHOGANY									
3,400.00	9.63	286.81	3,359.44	143.14	-473.95	495.10	0.00	0.00	0.00
3,500.00	9.63	286.81	3,458.03	147.98	-489.97	511.82	0.00	0.00	0.00
3,600.00	9.63	286.81	3,556.62	152.81	-505.98	528.55	0.00	0.00	0.00
3,700.00	9.63	286.81	3,655.21	157.65	-521.99	545.28	0.00	0.00	0.00
3,800.00	9.63	286.81	3,753.80	162.49	-538.00	562.00	0.00	0.00	0.00
3,824.55	9.63	286.81	3,778.00	163.67	-541.93	566.11	0.00	0.00	0.00
8 5/8"									
3,900.00	9.63	286.81	3,852.39	167.32	-554.02	578.73	0.00	0.00	0.00
4,000.00	9.63	286.81	3,950.98	172.16	-570.03	595.46	0.00	0.00	0.00
4,100.00	9.63	286.81	4,049.57	176.99	-586.04	612.19	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SRW 823-21K4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Site:	SOUTH RED WASH UNIT 823-21K4BS	North Reference:	True
Well:	SRW 823-21K4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PERMIT		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,200.00	9.63	286.81	4,148.16	181.83	-602.05	628.91	0.00	0.00	0.00
4,300.00	9.63	286.81	4,246.75	186.67	-618.07	645.64	0.00	0.00	0.00
4,400.00	9.63	286.81	4,345.35	191.50	-634.08	662.37	0.00	0.00	0.00
4,500.00	9.63	286.81	4,443.94	196.34	-650.09	679.09	0.00	0.00	0.00
4,600.00	9.63	286.81	4,542.53	201.17	-666.11	695.82	0.00	0.00	0.00
4,700.00	9.63	286.81	4,641.12	206.01	-682.12	712.55	0.00	0.00	0.00
4,800.00	9.63	286.81	4,739.71	210.85	-698.13	729.28	0.00	0.00	0.00
4,900.00	9.63	286.81	4,838.30	215.68	-714.14	746.00	0.00	0.00	0.00
5,000.00	9.63	286.81	4,936.89	220.52	-730.16	762.73	0.00	0.00	0.00
5,100.00	9.63	286.81	5,035.48	225.36	-746.17	779.46	0.00	0.00	0.00
5,200.00	9.63	286.81	5,134.07	230.19	-762.18	796.18	0.00	0.00	0.00
5,300.00	9.63	286.81	5,232.67	235.03	-778.20	812.91	0.00	0.00	0.00
5,400.00	9.63	286.81	5,331.26	239.86	-794.21	829.64	0.00	0.00	0.00
5,500.00	9.63	286.81	5,429.85	244.70	-810.22	846.37	0.00	0.00	0.00
5,600.00	9.63	286.81	5,528.44	249.54	-826.23	863.09	0.00	0.00	0.00
5,672.58	9.63	286.81	5,600.00	253.05	-837.86	875.23	0.00	0.00	0.00
WASATCH									
5,700.00	9.63	286.81	5,627.03	254.37	-842.25	879.82	0.00	0.00	0.00
5,795.11	9.63	286.81	5,720.80	258.97	-857.48	895.73	0.00	0.00	0.00
Start Drop -2.00									
5,800.00	9.53	286.81	5,725.62	259.21	-858.26	896.54	2.00	-2.00	0.00
5,900.00	7.53	286.81	5,824.51	263.50	-872.46	911.38	2.00	-2.00	0.00
6,000.00	5.53	286.81	5,923.86	266.78	-883.34	922.75	2.00	-2.00	0.00
6,100.00	3.53	286.81	6,023.54	269.07	-890.91	930.65	2.00	-2.00	0.00
6,200.00	1.53	286.81	6,123.44	270.35	-895.14	935.07	2.00	-2.00	0.00
6,276.57	0.00	0.00	6,200.00	270.64	-896.12	936.09	2.00	-2.00	95.59
Start 3860.00 hold at 6276.57 MD - TOC_SRW 823-21K4BS									
6,300.00	0.00	0.00	6,223.43	270.64	-896.12	936.09	0.00	0.00	0.00
6,400.00	0.00	0.00	6,323.43	270.64	-896.12	936.09	0.00	0.00	0.00
6,500.00	0.00	0.00	6,423.43	270.64	-896.12	936.09	0.00	0.00	0.00
6,600.00	0.00	0.00	6,523.43	270.64	-896.12	936.09	0.00	0.00	0.00
6,700.00	0.00	0.00	6,623.43	270.64	-896.12	936.09	0.00	0.00	0.00
6,800.00	0.00	0.00	6,723.43	270.64	-896.12	936.09	0.00	0.00	0.00
6,900.00	0.00	0.00	6,823.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,000.00	0.00	0.00	6,923.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,100.00	0.00	0.00	7,023.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,200.00	0.00	0.00	7,123.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,300.00	0.00	0.00	7,223.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,400.00	0.00	0.00	7,323.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,500.00	0.00	0.00	7,423.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,600.00	0.00	0.00	7,523.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,700.00	0.00	0.00	7,623.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,800.00	0.00	0.00	7,723.43	270.64	-896.12	936.09	0.00	0.00	0.00
7,847.57	0.00	0.00	7,771.00	270.64	-896.12	936.09	0.00	0.00	0.00
MESAVERDE									
7,900.00	0.00	0.00	7,823.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,000.00	0.00	0.00	7,923.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,100.00	0.00	0.00	8,023.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,200.00	0.00	0.00	8,123.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,300.00	0.00	0.00	8,223.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,400.00	0.00	0.00	8,323.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,500.00	0.00	0.00	8,423.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,600.00	0.00	0.00	8,523.43	270.64	-896.12	936.09	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SRW 823-21K4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Site:	SOUTH RED WASH UNIT 823-21K4BS	North Reference:	True
Well:	SRW 823-21K4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PERMIT		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,700.00	0.00	0.00	8,623.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,800.00	0.00	0.00	8,723.43	270.64	-896.12	936.09	0.00	0.00	0.00
8,900.00	0.00	0.00	8,823.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,000.00	0.00	0.00	8,923.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,100.00	0.00	0.00	9,023.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,200.00	0.00	0.00	9,123.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,300.00	0.00	0.00	9,223.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,400.00	0.00	0.00	9,323.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,500.00	0.00	0.00	9,423.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,600.00	0.00	0.00	9,523.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,700.00	0.00	0.00	9,623.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,800.00	0.00	0.00	9,723.43	270.64	-896.12	936.09	0.00	0.00	0.00
9,900.00	0.00	0.00	9,823.43	270.64	-896.12	936.09	0.00	0.00	0.00
10,000.00	0.00	0.00	9,923.43	270.64	-896.12	936.09	0.00	0.00	0.00
10,100.00	0.00	0.00	10,023.43	270.64	-896.12	936.09	0.00	0.00	0.00
10,136.57	0.00	0.00	10,060.00	270.64	-896.12	936.09	0.00	0.00	0.00
TD at 10136.57 - SEGO - PBHL_SRW 823-21K4BS									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
TOC_SRW 823-21K4BS	0.00	0.00	6,200.00	270.64	-896.12	14,568,991.49	2,106,495.36	40.105947	-109.333242
- plan hits target center									
- Point									
PBHL_SRW 823-21K4B	0.00	0.00	10,060.00	270.64	-896.12	14,568,991.49	2,106,495.36	40.105947	-109.333242
- plan hits target center									
- Circle (radius 25.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
3,824.55	3,778.00	8 5/8"		8.625	11.000

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,644.93	2,615.00	GREEN RIVER				
2,915.74	2,882.00	BIRDSNEST				
3,368.12	3,328.00	MAHOGANY				
5,672.58	5,600.00	WASATCH				
7,847.57	7,771.00	MESAVERDE				
10,136.57	10,060.00	SEGO				

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well SRW 823-21K4BS
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Project:	UTAH - UTM (feet), NAD27, Zone 12N	MD Reference:	GL 5246 & KB 4 @ 5250.00ft (ASSUMED)
Site:	SOUTH RED WASH UNIT 823-21K4BS	North Reference:	True
Well:	SRW 823-21K4BS	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PERMIT		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	Start Build 2.00
681.46	679.20	11.67	-38.64	Start 5113.65 hold at 681.46 MD
5,795.11	5,720.80	258.97	-857.48	Start Drop -2.00
6,276.57	6,200.00	270.64	-896.12	Start 3860.00 hold at 6276.57 MD
10,136.57	10,060.00	270.64	-896.12	TD at 10136.57

Kerr-McGee Oil & Gas Onshore. L.P.

API

SRW 823-21K4BS

Surface:	1548 FSL / 2252 FEL	NWSE	Lot
BHL:	1822 FSL / 2139 FWL	NESW	Lot

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on April 18, 2013. Present were:

- Tyler Cox, Aaron Roe, Jessica DaBell, Korie Hamming- BLM
- Mitch Batty - Timberline Engineering & Land Surveying, Inc.
- Gina Becker, Rod Anderson, Doyle Homes, Casey McKee, Doreen Green - Kerr-McGee
- Bill Knapp - ICF

A. Existing Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Topo B for existing roads.

B. New or Reconstructed Access Roads:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

The following segments are "on-lease"

±4105' (0.77 miles) – Section 21 T8S R23E (SE/4) – On-lease UTU73021, from the edge of the pad to the proposed road at the SRW 823-22K intersection in Sec. 22 on lease UTU71424.
Please refer to Topo Map B.

C. Location of Existing Wells:

Please refer to Topo C for existing wells.

D. Location of Existing and/or Proposed Facilities:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Gas Gathering Pipeline infrastructure will be utilized to collect and transport gas from the well which is owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

GAS GATHERING

Please refer to Exhibit A and Topo D2- Pad and Pipeline Detail.

The total gas gathering pipeline distance from the meter to the tie in point is $\pm 12805'$ and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

- $\pm 265'$ (0.05 miles) – Section 21 T8S R23E (SE/4) – On-lease UTU73021, BLM surface, New 6" surface gas gathering pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.
- $\pm 4080'$ (0.77 miles) – Section 21 T8S R23E (SE/4) – On-lease UTU73021, BLM surface, New 6" surface gas gathering pipeline from the edge of the pad to the proposed surface 6" gas pipeline tie-in point at the SRW 823-22K intersection in Sec. 22 on-lease UTU71424. This portion will run concurrently with the SRW 823-22K, SRW 823-22G, and SRW 823-15O. Please refer to Exhibit A, Line 4.
- $\pm 2890'$ (0.55 miles) – Section 22 T8S R23E (SW/4) – On-lease UTU71424, BLM surface, New 6" surface gas gathering pipeline from the proposed surface 6" gas pipeline tie-in point at the SRW 823-22K intersection to the proposed surface 6" gas pipeline tie-in point at the SRW 823-22G intersection. This portion of pipeline will run concurrently with the SRW 823-22K, SRW 823-22G, and SRW 823-15O. Please refer to Exhibit A, Line 3.
- $\pm 2840'$ (0.53 miles) – Section 22 T8S R23E (NE/4) – On-lease UTU71424, BLM surface, New 6" surface gas gathering pipeline from the proposed surface 6" gas pipeline tie-in point at the SRW 823-22G intersection to the proposed surface 6" gas pipeline tie in point at the SRW 823-15O intersection. This portion will run concurrently with SRW 823-22K, SRW 823-22G, and SRW 823-15O. Please refer to Exhibit A, Line 3. Please refer to Exhibit A, Line 2
- $\pm 2730'$ (0.51 miles) – Section 22 T8S R23E (NE/4) – On-lease UTU71424, BLM surface, New 6" surface gas gathering pipeline from the proposed surface 6" gas pipeline tie-in point at the SRW 823-15O intersection to the existing surface 6" gas pipeline to the Northeast in Sec. 14. This portion will run concurrently with SRW 823-22K, SRW 823-22G, and SRW 823-15O. Please refer to Exhibit A, Line 1.

Pipeline Gathering Construction

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

The Anadarko Completions Transportation System (ACTS) information:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Please refer to Exhibit C for ACTS Lines

E. Location and Types of Water Supply:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Water will be hauled to location over the roads marked on Maps A and B.

F. Construction Materials:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

G. Methods for Handling Waste:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Materials Management

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

J. Plans for Surface Reclamation:

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Interim Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Measures Common to Interim and Final Reclamation

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Weed Control

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Monitoring

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

K. Surface/Mineral Ownership:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

L. Other Information:

Cultural and Paleontological Resources

Please refer to the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

Resource Reports:

A Class I literature survey was completed on April 23, 2013 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 13-057.

A paleontological reconnaissance survey was completed on April 01, 2013 by SWCA Environmental Consultants. For additional details please refer to report UT10-14314-12.

Biological field survey was completed on April 9, 2013 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-875.

Proposed Action Annual Emissions Tables:

Please refer to the Appendix in the Standard Operating Practices on file at the BLM Vernal Field Office dated October 31, 2012.

M. Lessee's or Operators' Representative & Certification:

Cara Mahler
Regulatory Analyst II
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6029

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

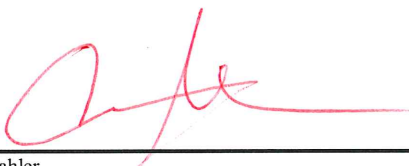
Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.



Cara Mahler

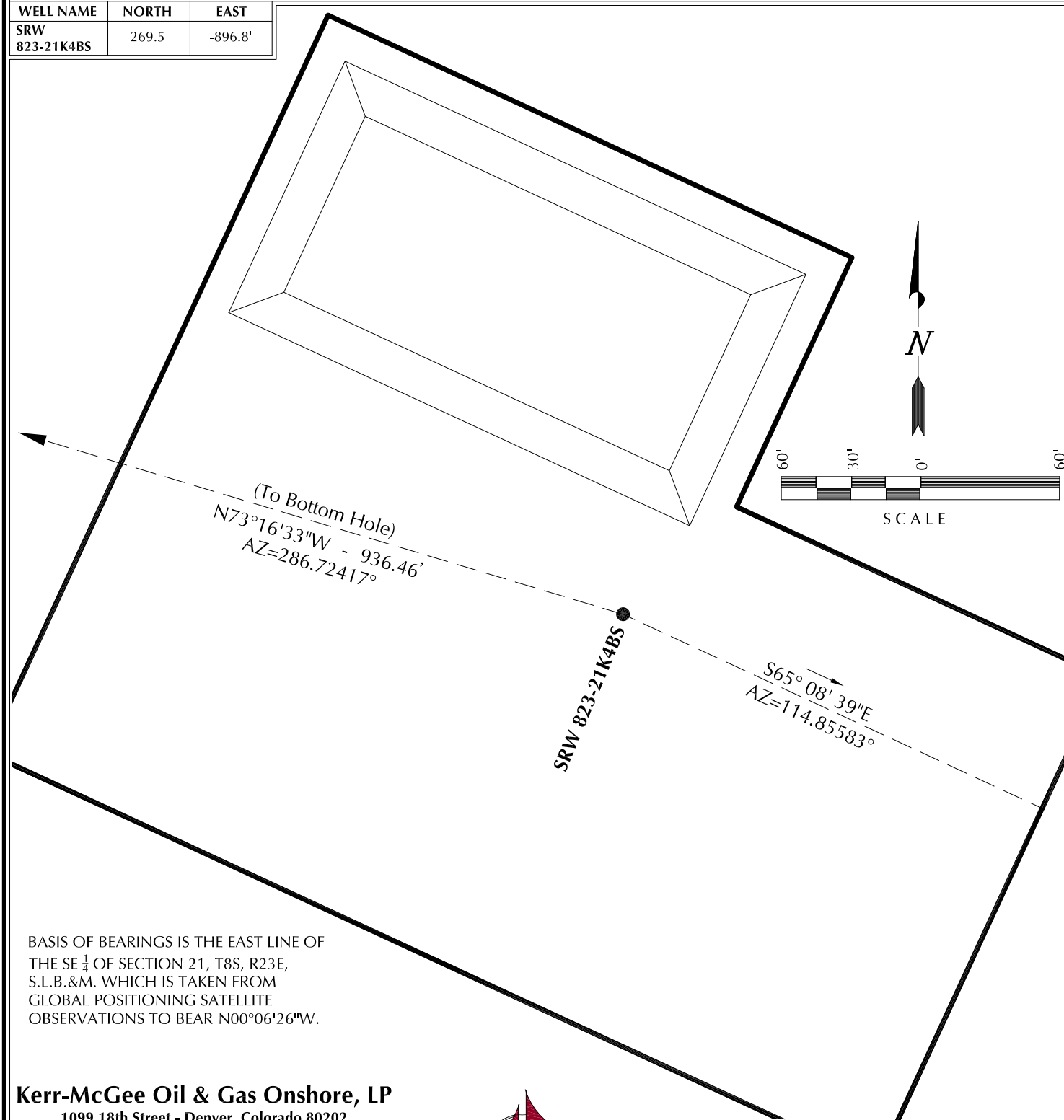
May 20, 2013

Date

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
SRW 823-21K4BS	40°06'18.607"	109°19'50.585"	40°06'18.733"	109°19'48.135"	1548' FSL	40°06'21.283"	109°20'02.118"	40°06'21.409"	109°19'59.669"	1822' FSL
	40.105169°	109.330718°	40.105204°	109.330038°	2252' FEL	40.105912°	109.333922°	40.105947°	109.333241°	2139' FWL

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST
SRW 823-21K4BS	269.5'	-896.8'



BASIS OF BEARINGS IS THE EAST LINE OF THE SE $\frac{1}{4}$ OF SECTION 21, T8S, R23E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°06'26"W.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - SRW 823-21J

WELL PAD INTERFERENCE PLAT
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UTAH COUNTY, UTAH.



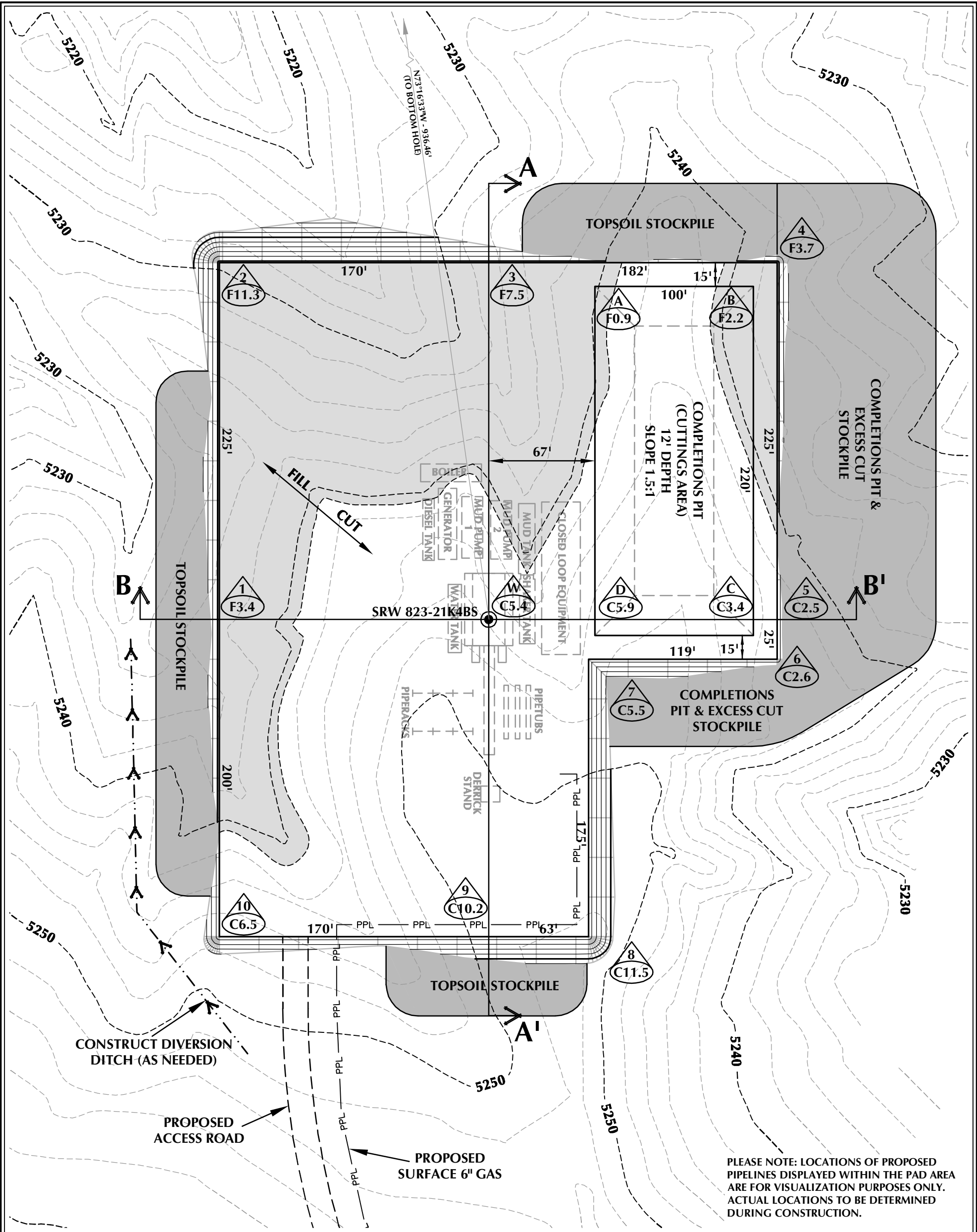
CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 3-25-13	SURVEYED BY: J.W.	SHEET NO: 2 2 OF 13
DATE DRAWN: 3-27-13	DRAWN BY: C.T.C.	
SCALE: 1" = 60'	Date Last Revised:	



PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

WELL PAD - SRW 823-21J (CLOSED LOOP) DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5246.1'
FINISHED GRADE ELEVATION = 5240.7'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1
TOTAL WELL PAD AREA = 3.30 ACRES
TOTAL DISTURBANCE AREA = 4.65 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - SRW 823-21J

WELL PAD - LOCATION LAYOUT
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 13,326 C.Y.
TOTAL FILL FOR WELL PAD = 12,555 C.Y.
TOPSOIL @ 6" DEPTH = 2,661 C.Y.
EXCESS MATERIAL = 771 C.Y.

COMPLETIONS PIT QUANTITIES

TOTAL CUT FOR COMPLETIONS PIT
+/- 7,410 C.Y.
COMPLETIONS PIT CAPACITY
(2' OF FREEBOARD)
+/- 28,140 BARRELS

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL — PROPOSED PIPELINE
- EPL — EXISTING PIPELINE



HORIZONTAL 0 30' 60' 1" = 60'
2' CONTOURS

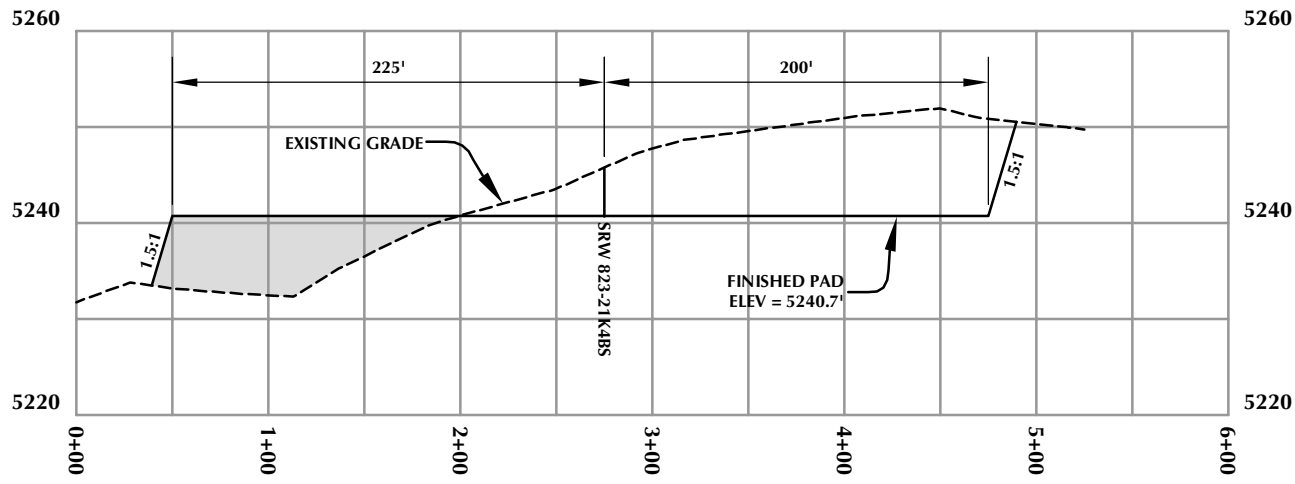
SCALE: 1"=60' DATE: 4/30/13 SHEET NO:

REVISED:

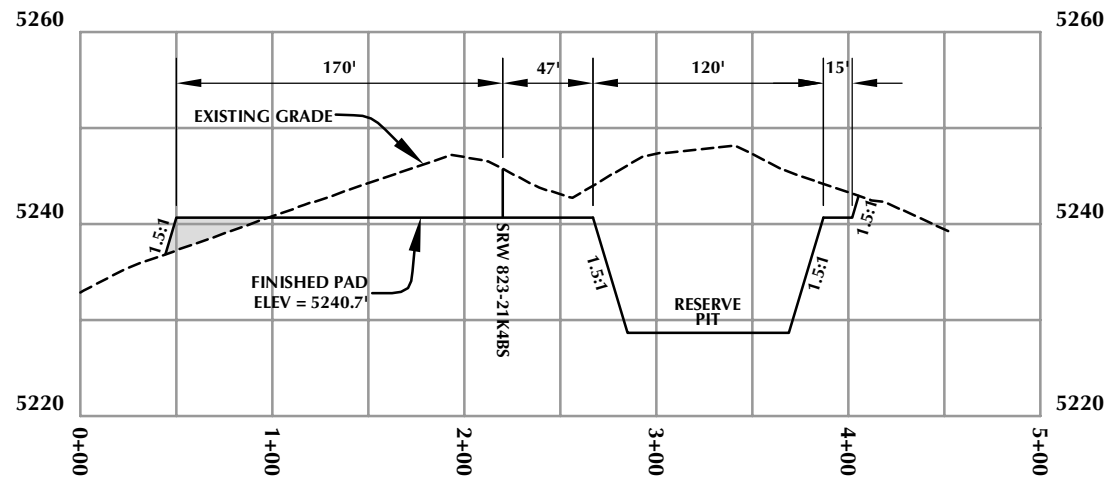
3B 3B OF 13

TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365



CROSS SECTION A-A'



CROSS SECTION B-B'

NOTE: CROSS SECTION B-B' DEPICTS
MAXIMUM RESERVE PIT DEPTH.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - SRW 823-21J

WELL PAD - CROSS SECTIONS
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

HORIZONTAL 0 50' 100' 1" = 100'
VERTICAL 0 10' 20' 1" = 20'

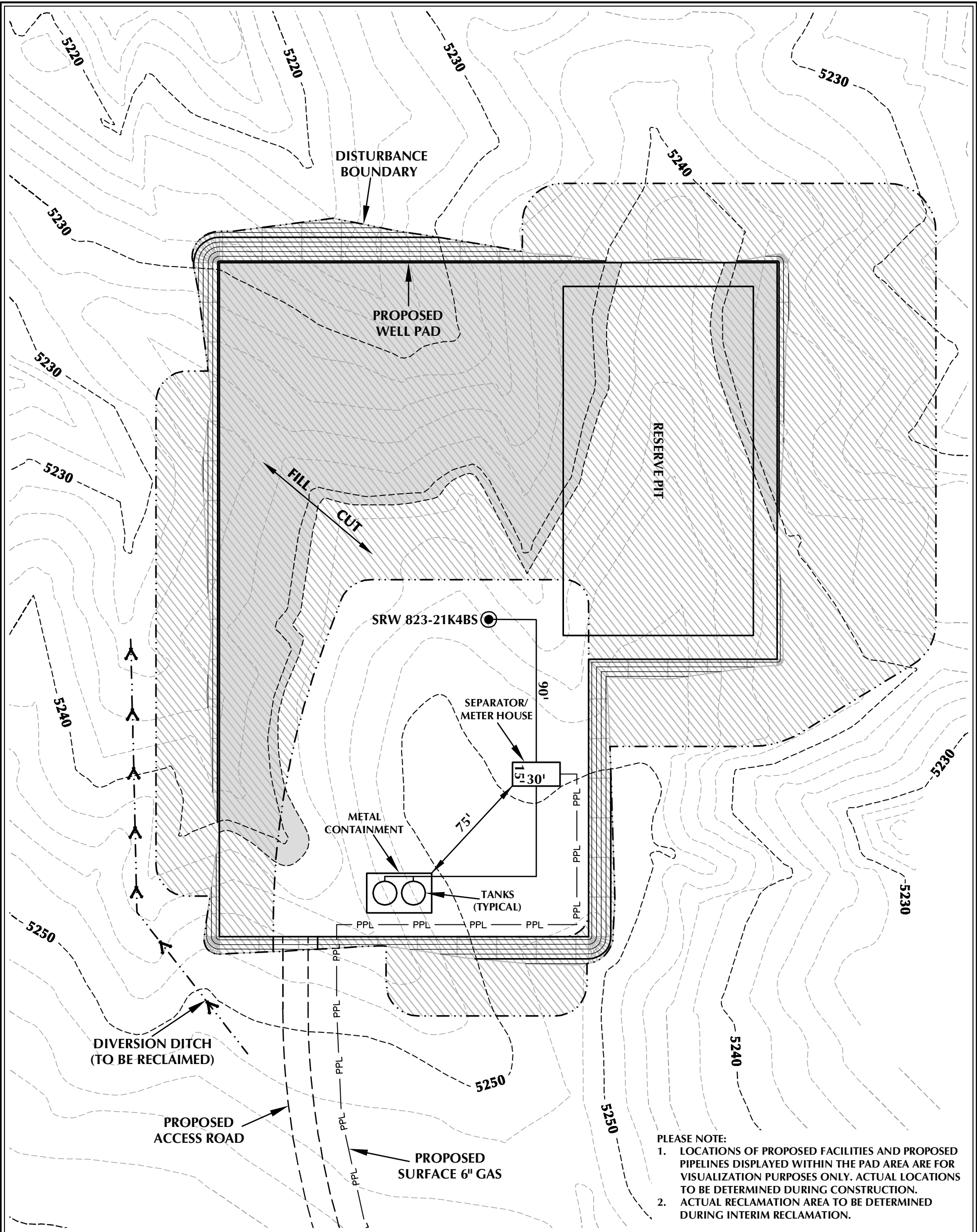
SCALE: 1"=100'
REVISED:

DATE: 4/4/13

SHEET NO:

4

4 OF 13



- PLEASE NOTE:
1. LOCATIONS OF PROPOSED FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.
 2. ACTUAL RECLAMATION AREA TO BE DETERMINED DURING INTERIM RECLAMATION.

WELL PAD - SRW 823-21J RECLAMATION DESIGN SUMMARY

TOTAL DISTURBANCE AREA = 4.65 ACRES
RECLAMATION AREA = 3.70 ACRES
TOTAL WELL PAD AREA AFTER RECLAMATION = 0.95 ACRES

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - SRW 823-21J

WELL PAD - RECLAMATION LAYOUT
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL - PROPOSED PIPELINE
- EPL - EXISTING PIPELINE
- RECLAMATION AREA



HORIZONTAL 0 30' 60' 1" = 60'

2' CONTOURS

SCALE: 1"=60' DATE: 4/4/13 SHEET NO:

REVISED: KGS 4/30/13 5 5 OF 13



PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKE

CAMERA ANGLE: SOUTHWESTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHWESTERLY

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - SRW 823-21J

LOCATION PHOTOS
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH.



CONSULTING, LLC
2155 North Main Street
Sheridan, WY 82801
Phone 307-674-0609
Fax 307-674-0182

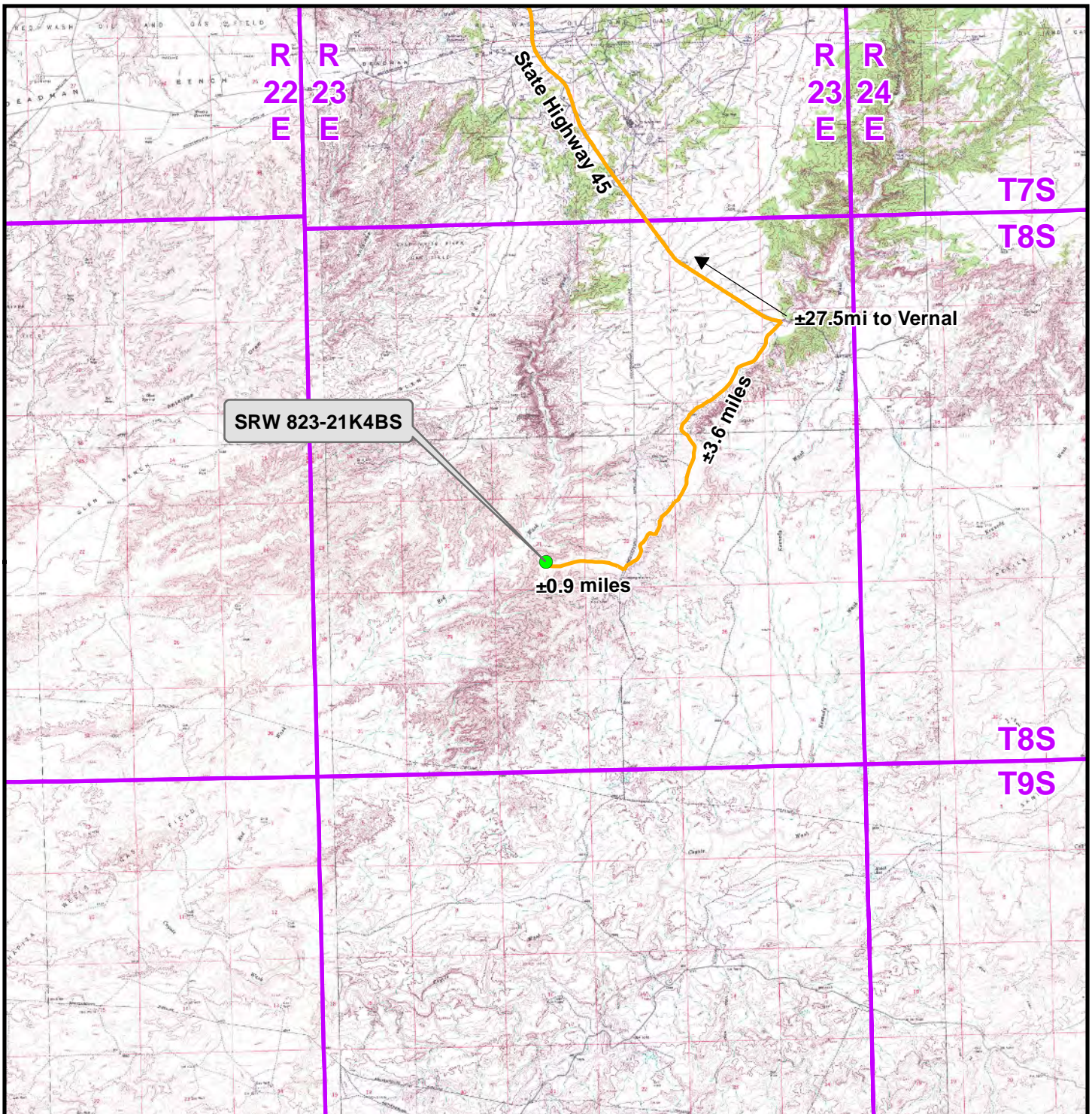
TIMBERLINE

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 3-25-13	PHOTOS TAKEN BY: J.W.	SHEET NO: 6 6 OF 13
DATE DRAWN: 3-27-13	DRAWN BY: C.T.C.	
Date Last Revised:		

K:\ANADARKO\2013\2013_22_SRW_WELL_STAKING\GIS\Maps_ABCDE\SRW 823-21J\SRW 823-21J_A.mxd 5/2/2013 7:45:09 AM



Legend

● Proposed Well Location — Access Route - Proposed

WELL PAD - SRW 823-21J

TOPO A
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
Gas Onshore L.P.**

**1099 18th Street
Denver, Colorado 80202**



CONSULTING, LLC
2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182



SCALE: 1:100,000

NAD83 USP Central

SHEET NO:

DRAWN: TL

DATE: 4 Apr 2013

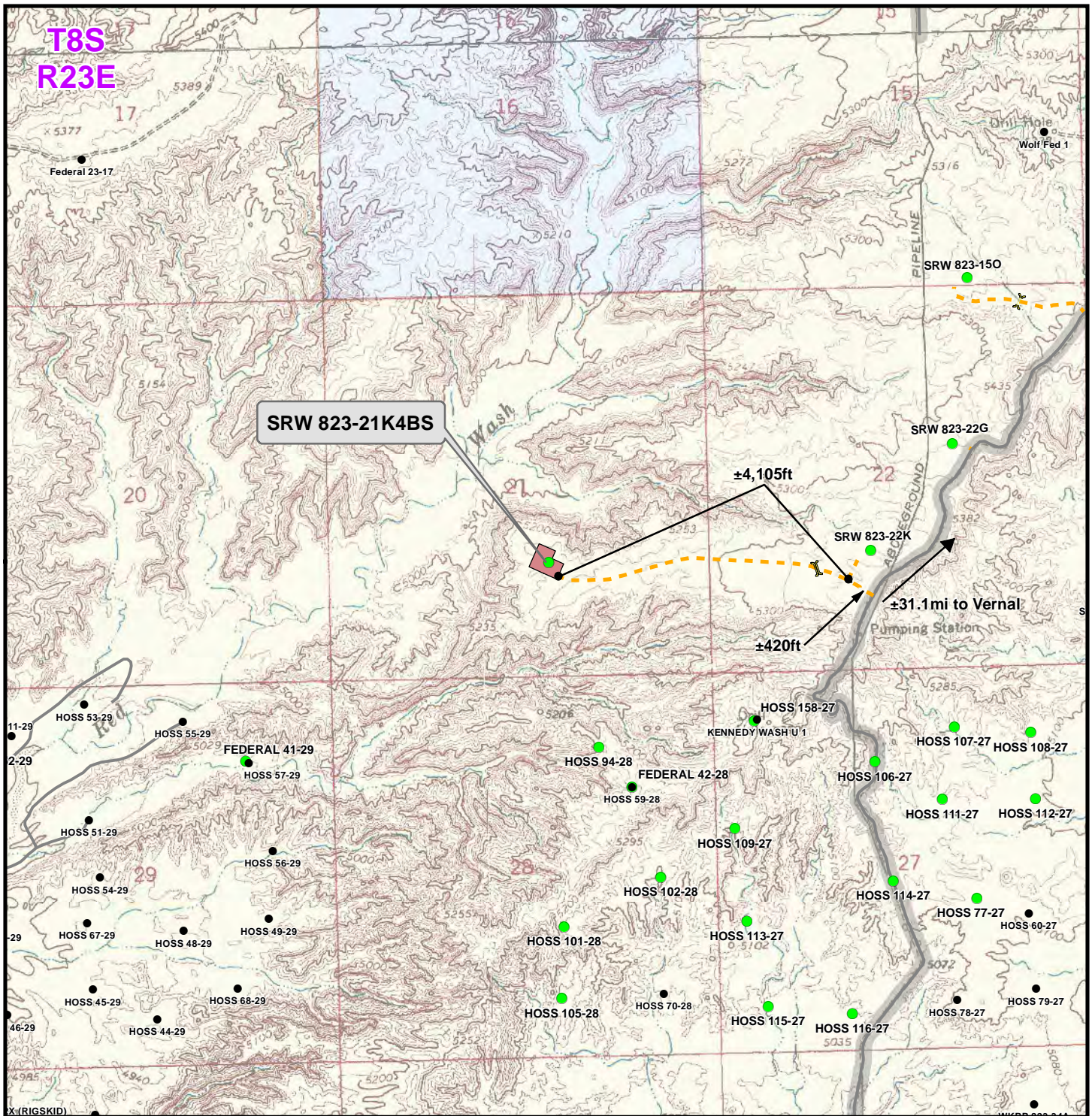
7

REVISED:

DATE:

7 OF 13

K:\ANADARKO\2013\22_SRW_WELL_STAKING\GIS\Maps_ABCDE\SRW 823-21\J_B.mxd\4/30/2013 10:43:11 AM



Legend

- | | | | | | |
|-------------------|------------|---------------------|--------------------------|-----------------------------|-----------|
| ● Well - Proposed | ■ Well Pad | --- Road - Proposed | ▬ County Road | ■ Bureau of Land Management | ■ State |
| ● Well - Existing | --- | --- Road - Existing | ⚡ Culvert/LWC - Proposed | ■ Indian Reservation | ■ Private |

Total Proposed Road Length: ±4,105ft

WELL PAD - SRW 823-21J

TOPO B
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
Gas Onshore L.P.**

**1099 18th Street
Denver, Colorado 80202**

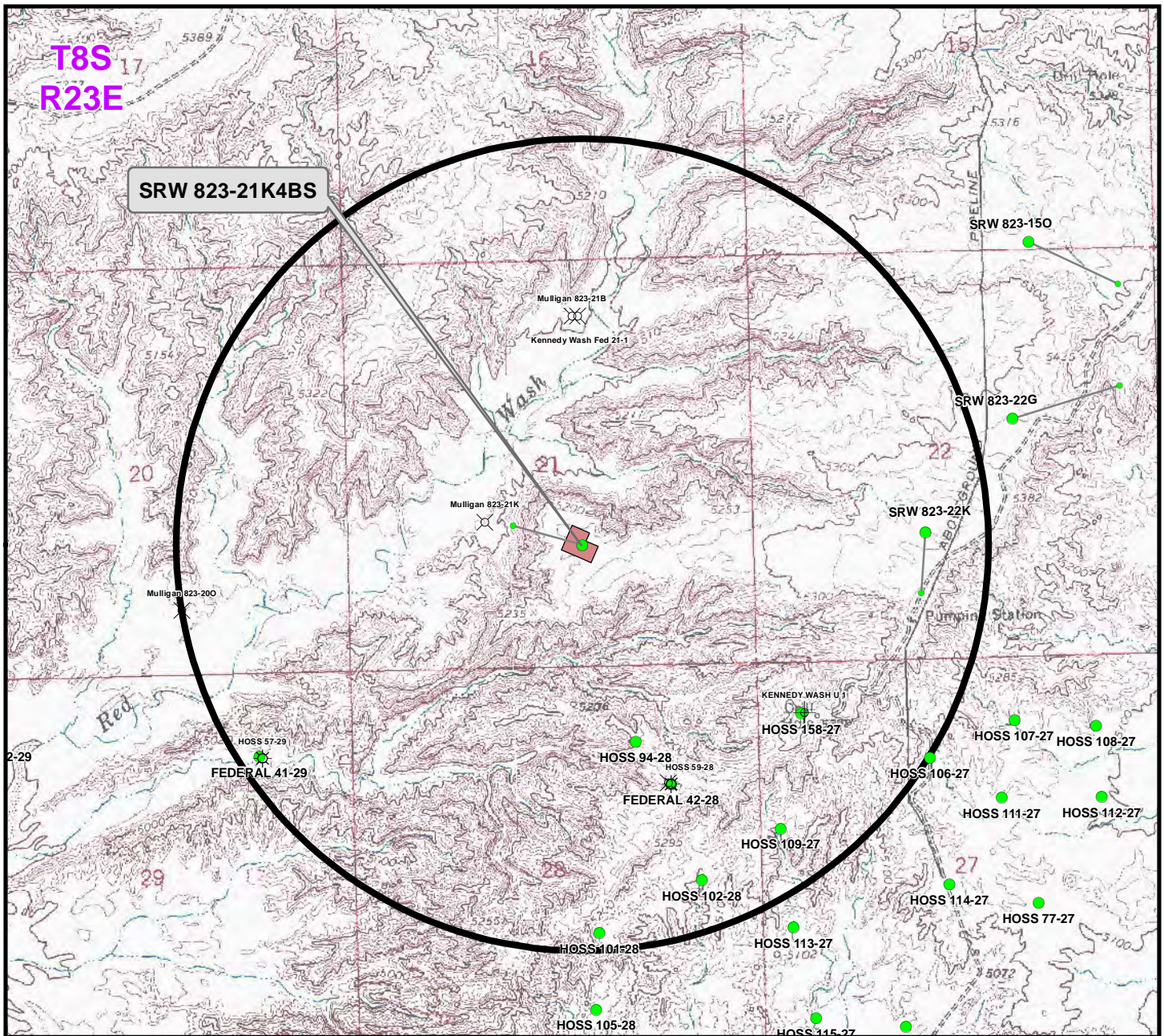


CONSULTING, LLC
2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182



SCALE: 1" = 2,000ft	NAD83 USP Central	SHEET NO: 8 8 OF 13
DRAWN: TL	DATE: 4 Apr 2013	
REVISED: TL	DATE: 12 Apr 2013	

K:\ANADARKO\2013\22_SRW_WELL_STAKING\GIS\Maps_ABCDE\SRW 823-21\SRW 823-21J_C.mxd4/30/2013 10:46:03 AM



Well locations derived from Utah Division of Oil, Gas and Mining (UDOGM) (oilgas.ogm.utah.gov). The estimated distances from proposed bore locations to the nearest existing bore locations are based on UDOGM data.

Proposed Well	Nearest Well Bore	Footage
SRW 823-21K4BS	HOSS 59-28	3,941ft

Legend

- | | | | | | |
|--------------------------|------------------------|------------------------|-------------------------|----------------------|-----------------------|
| ● Well - Proposed | — Well Path | ☀ Producing | ⊕ Deferred | ⚡ Active Injector | ⊕ Plugged & Abandoned |
| ● Bottom Hole - Proposed | ■ Well Pad | ☺ Spudded | ✕ Cancelled | ⚡ Location Abandoned | ⊕ Shut-In |
| ● Bottom Hole - Existing | ○ Well - 1 Mile Radius | ○ APD Approved | ⊖ Temporarily Abandoned | | |
| | | ⊖ Preliminary Location | | | |

WELL PAD - SRW 823-21J

TOPO C
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
Gas Onshore L.P.**

1099 18th Street
Denver, Colorado 80202



CONSULTING, LLC

2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182

SCALE: 1" = 2,000ft

DRAWN: TL

REVISED:

NAD83 USP Central

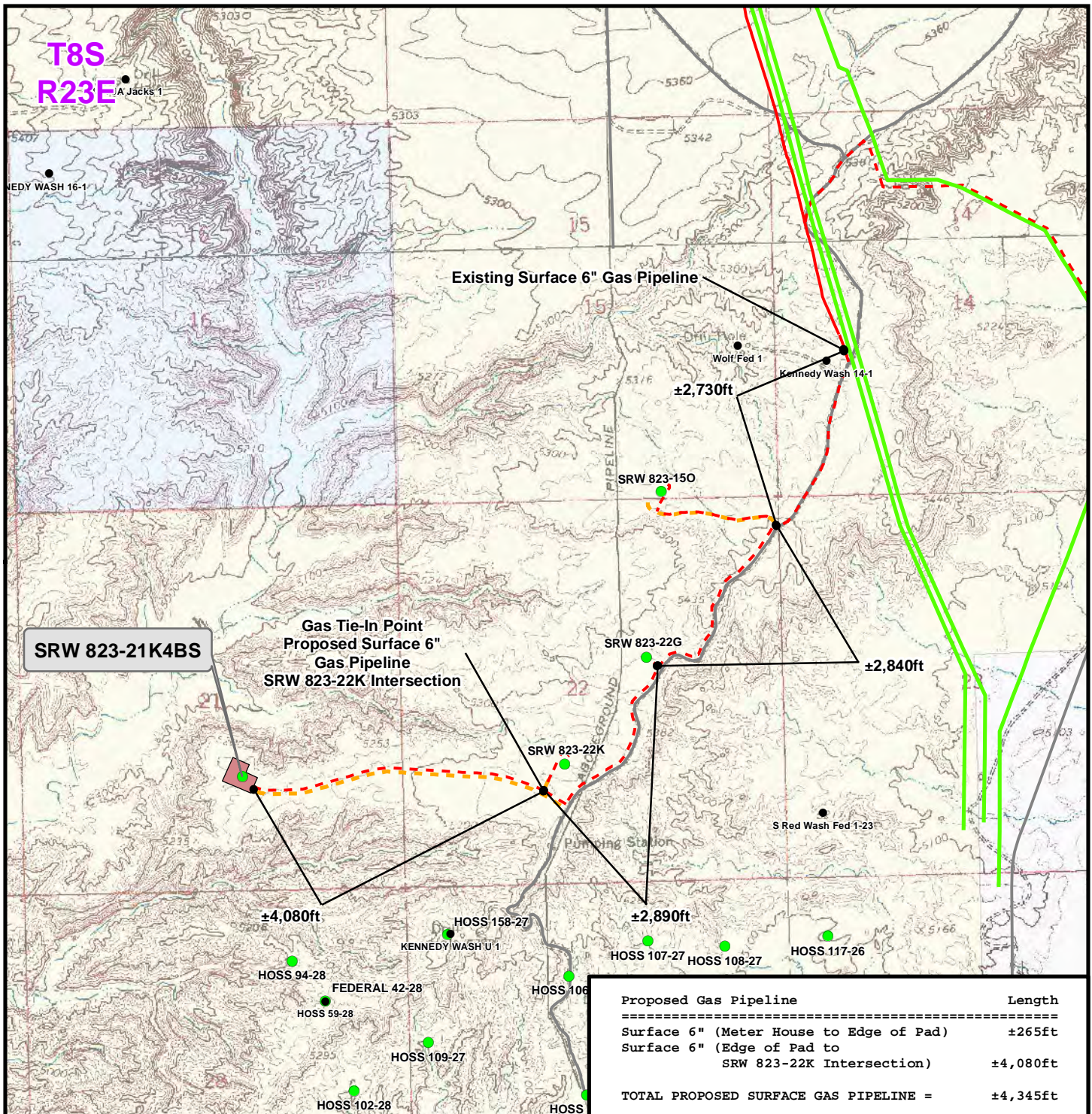
DATE: 12 Apr 2013

DATE:

SHEET NO:

9

9 OF 13



Legend

- | | | | | | |
|-------------------|-------------------------------------|-------------------------------------|-----------------------|-----------------------------|-----------|
| ● Well - Proposed | - - - Gas Pipeline - Proposed | - - - Liquid Pipeline - Proposed | - - - Road - Proposed | ■ Bureau of Land Management | ■ State |
| ● Well - Existing | - - - Gas Pipeline - To Be Upgraded | - - - Liquid Pipeline - Existing | - - - Road - Existing | ■ Indian Reservation | ■ Private |
| ■ Well Pad | - - - Gas Pipeline - Existing | - - - Overhead Powerline - Existing | | | |

WELL PAD - SRW 823-21J

TOPO D
SRW 823-21K4BS
 LOCATED IN SECTION 21, T8S, R23E,
 S.L.B.&M., UINTAH COUNTY, UTAH

**Kerr-McGee Oil &
 Gas Onshore L.P.**

**1099 18th Street
 Denver, Colorado 80202**



CONSULTING, LLC
 2155 North Main Street
 Sheridan, Wyoming 82801
 Phone 307-674-0609
 Fax 307-674-0182



SCALE: 1" = 2,000ft

DRAWN: TL

REVISED:

NAD83 USP Central

DATE: 12 Apr 2013

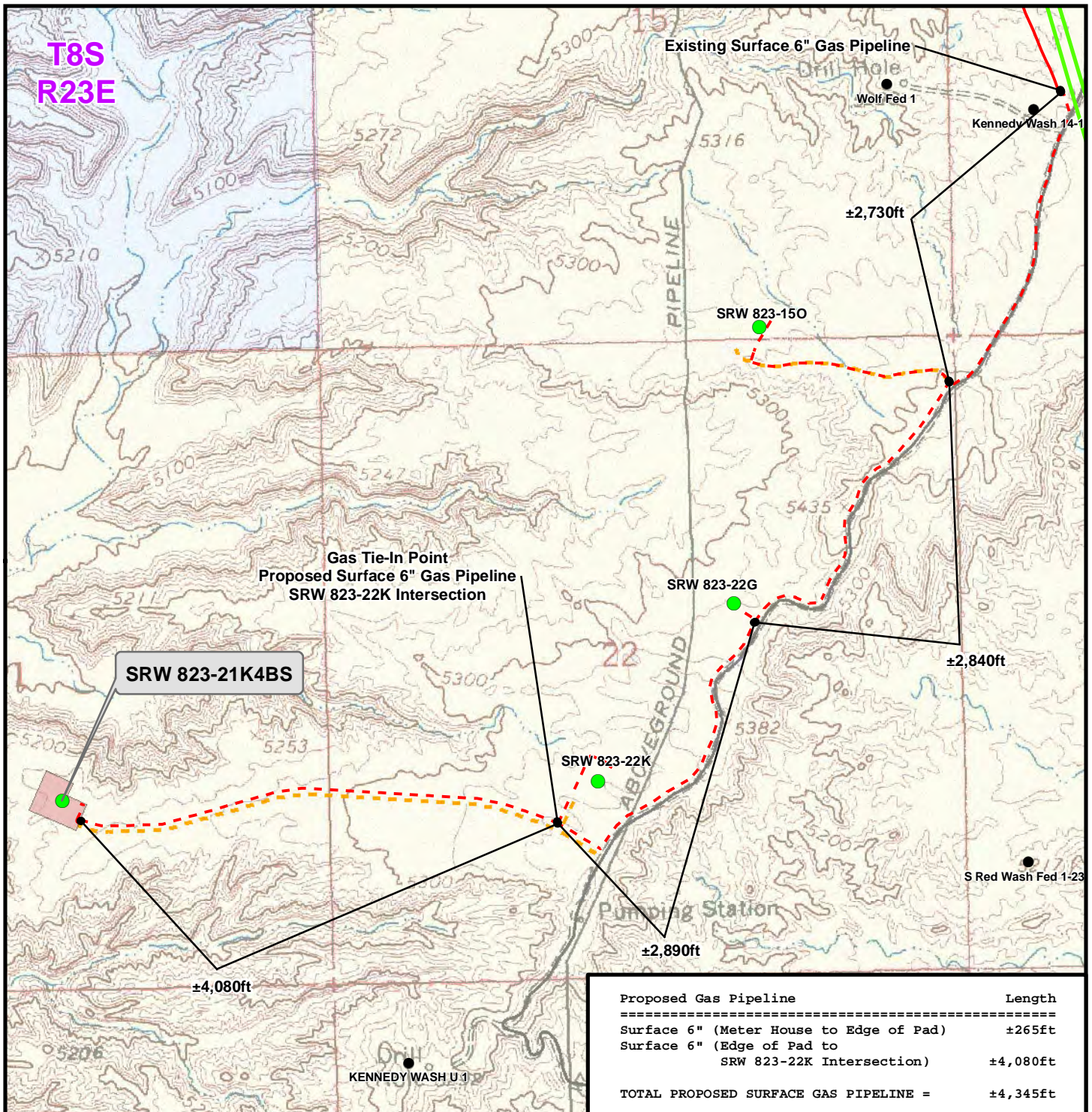
DATE:

SHEET NO:

10

10 OF 13

K:\ANADARKO\2013\22_SRW_WELL_STAKING\GIS\Maps_ABCDE\SRW 823-21\SRW 823-21J_D2.mxd/30/2013 10:51:04 AM



Legend

Well - Proposed	Well Pad - Proposed	Gas Pipeline - Proposed	Liquid Pipeline - Proposed	Road - Proposed	Bureau of Land Management
Well - Existing	Well Pad - Existing	Gas Pipeline - To Be Upgraded	Liquid Pipeline - Existing	Road - Existing	Indian Reservation
		Gas Pipeline - Existing	Overhead Powerline - Existing		State
					Private

WELL PAD - SRW 823-21J

TOPO D2 (PAD & PIPELINE DETAIL)
SRW 823-21K4BS
LOCATED IN SECTION 21, T8S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH

Kerr-McGee Oil & Gas Onshore L.P.

1099 18th Street
Denver, Colorado 80202



CONSULTING, LLC

2155 North Main Street
Sheridan, Wyoming 82801
Phone 307-674-0609
Fax 307-674-0182

SCALE: 1" = 1,200ft

DRAWN: TL

REVISED: TL

NAD83 USP Central

DATE: 4 Apr 2013

DATE: 12 Apr 2013

SHEET NO:

11

11 OF 13



Grasslands Consulting, Inc.

611 Corporate Circle, Unit H, Golden, CO 80401

(303) 759-5377 Office (303) 759-5324 Fax

SPECIAL STATUS PLANT SPECIES REPORT

Report Number: GCI-875

Report Date: April 29, 2013

Operator: Kerr-McGee Oil & Gas Onshore, LP

Operator Contact: Gina Becker (gina.becker@anadarko.com; 720-929-6086)

Proposed Project: South Red Wash (SRW) 823-15O, 823-21J, 823-22G, and 823-22K (including the construction of four well pads, four well bores (SRW 823-21K4BS, SRW 823-22A1CS, SRW 823-22H1CS, and SRW 823-22N1CS), and associated access roads, gas pipelines, and ACTS pipelines)

Location: Sections 15, 21, and 22 of Township 8 South, Range 23 East; Uintah County, Utah

Survey Species: Uinta Basin hookless cactus (*Sclerocactus wetlandicus*), Spanish bayonet (*Yucca sterilis*), and noxious weeds

Survey Dates: April 20-22, 2013

Observers: Grasslands Consulting, Inc. biologists Adrienne Cunningham, Mike Wilder, Liana Cabiles, Kyle Flesness, and field technicians



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.®

Paleontological Technical Report for South Red Wash 823 Well Pad and Pipeline Surveys Uintah County, Utah

Prepared for

Anadarko Petroleum Corporation

and

Bureau of Land Management

Prepared by

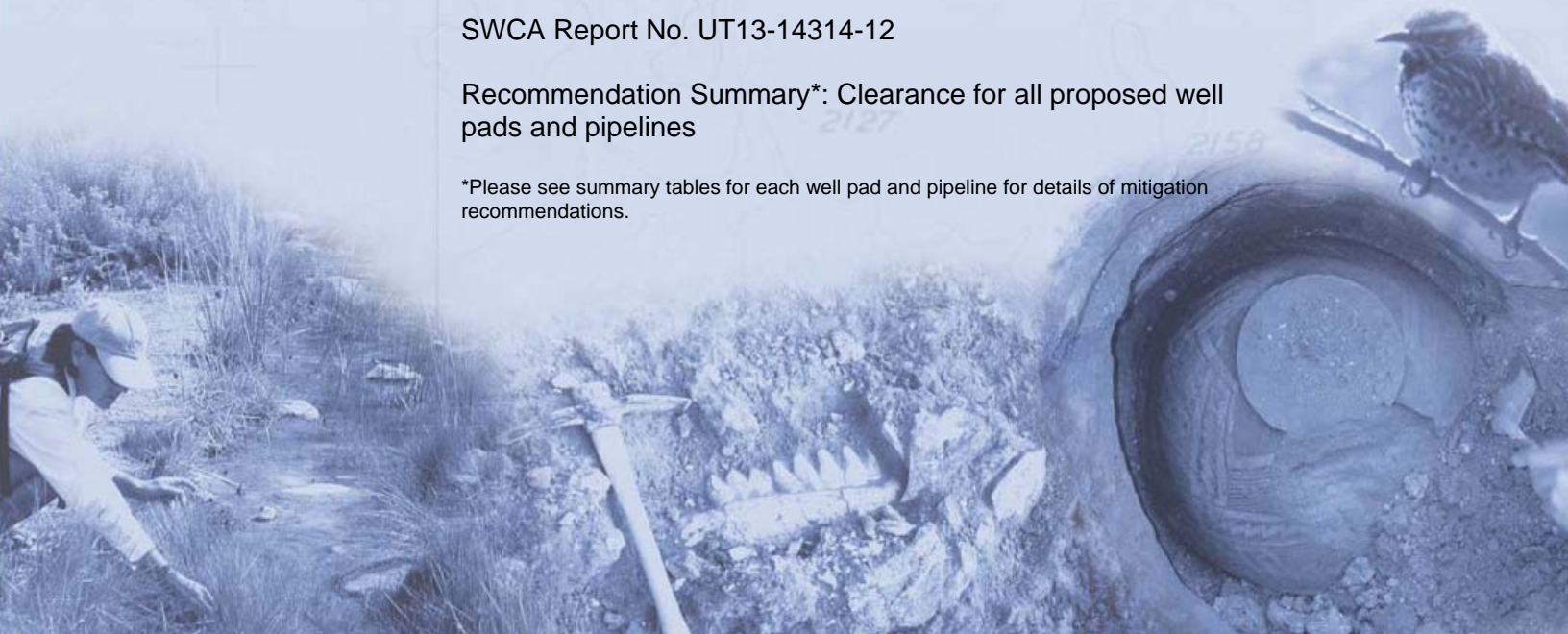
SWCA Environmental Consultants

April 2013

SWCA Report No. UT13-14314-12

Recommendation Summary*: Clearance for all proposed well pads and pipelines

*Please see summary tables for each well pad and pipeline for details of mitigation recommendations.



CULTURAL RESOURCE INVENTORY
OF KERR-MCGEE OIL & GAS ONSHORE LP'S
PROPOSED SRW 823-03O GR, SRW 823-10B GR,
SRW 823-10G GR, SRW 823-13G1CS, SRW 823-13L1CS,
SRW 823-21K4BS, SRW 823-22A1CS, SRW 823-22H1CS,
SRW 823-22N1CS, AND SRW 823-23H1CS
WELL LOCATIONS, UINTAH COUNTY, UTAH

By

Jacki A. Montgomery

Prepared For:

Bureau of Land Management
Vernal Field Office

Prepared Under Contract With:

Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, Utah 84052

Prepared By:

Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532

April 23, 2013

MOAC Report No. 13-057

United States Department of Interior (FLPMA)
Permit No. 13-UT-60122

State of Utah Antiquities Project (Survey)
Permit No. U-13-MQ-0218b



Kerr-McGee Oil & Gas Onshore LP

A wholly owned subsidiary of Anadarko Petroleum Corporation

1099 18th Street
Denver, CO 80202
720-929-6000 (main)

May 3, 2013

Mrs. Diana Mason
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, UT 84114-6100

RE: Well Name: SRW 823-21K4BS
T8S-R23E
Section 21: SL: NWSE, BHL: NESW
Surface Location: 2252' FEL, 1548' FSL
Bottom Hole: 2139' FWL, 1822' FSL
Uintah County, Utah

Dear Mrs. Mason:

Kerr-McGee Oil & Gas Onshore LP (KMG) has submitted a permit to drill the SRW 823-21K4BS well (Well) to test the Wasatch / Mesasverde / Blackhawk formations. The Well is located within an area that is not covered by a spacing order adjudicated by the Utah Department of Natural Resources, Division of Oil, Gas and Mining. Therefore, the Well is subject to the Utah Administrative Code Rule # R649-3, which provides for the location and siting of wells in the absence of spacing orders.

According to Rule # R649-3, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section, or a substantially equivalent lot or tract or combination of lots or tracts as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location, a "window" 400 feet square. Additionally, no oil or gas well shall be drilled less than 920 feet from any other well drilling to, is completed in, or capable of producing oil or gas from the same pool.

The surface location of the Well is approximately 232' feet outside of the 400 foot square "window" in the NWSE of Section 21. This is due to a limited amount of topographically acceptable surface locations and KMG's commitment to reducing its surface footprint. Additionally, there is no wellbore within 920 feet drilled to, is completed in, or capable of producing from the Wasatch / Mesasverde / Blackhawk formations. KMG owns 100% of the leasehold in the offset lands and has no objection to the exception location.

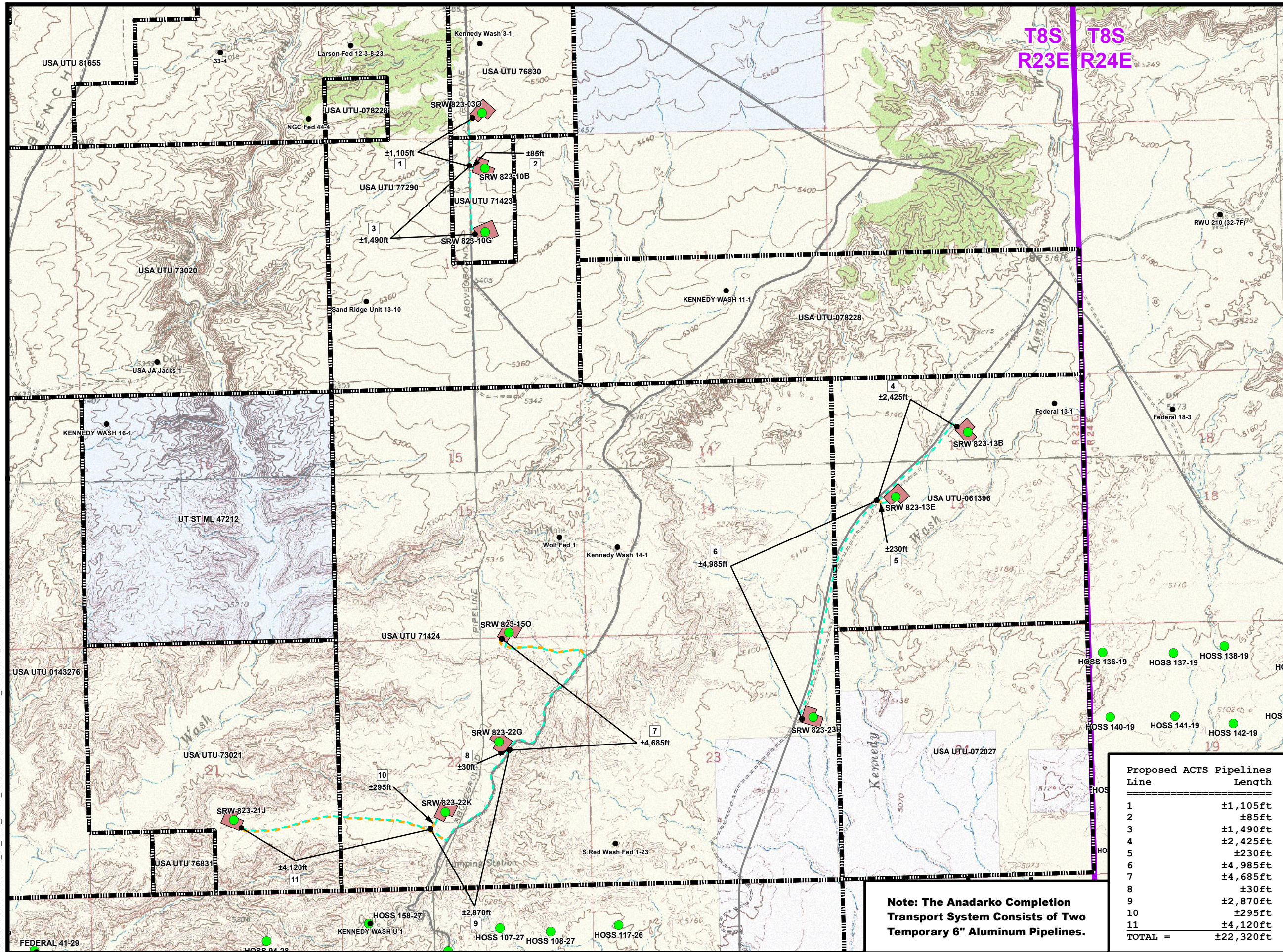
Kerr-McGee respectfully requests your approval of this exception location. If you have any questions or require any additional information, please do not hesitate to call me at 720-929-6351.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Spencer'.

Robert T. Spencer
Senior Landman

K:\ANADARKO\2013\2013_22_SRW_WELL_STAKING\GIS\Exhibits\SRW_EXHIBIT C.mxd 5/9/2013 8:54:23 AM



T8S
R23E

T8S
R24E

- Legend**
- Well - Proposed
 - Well - Existing
 - Well Pad - Proposed
 - ACTS Pipeline - Existing
 - ACTS Pipeline - Proposed
 - Road - Proposed
 - Road - Existing
 - Lease Boundary
 - Bureau of Land Management
 - Indian Reservation
 - State
 - Private



Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202



609 Consulting, LLC
2155 North Main Street
Sheridan, WY 82801
(307) 674-0609

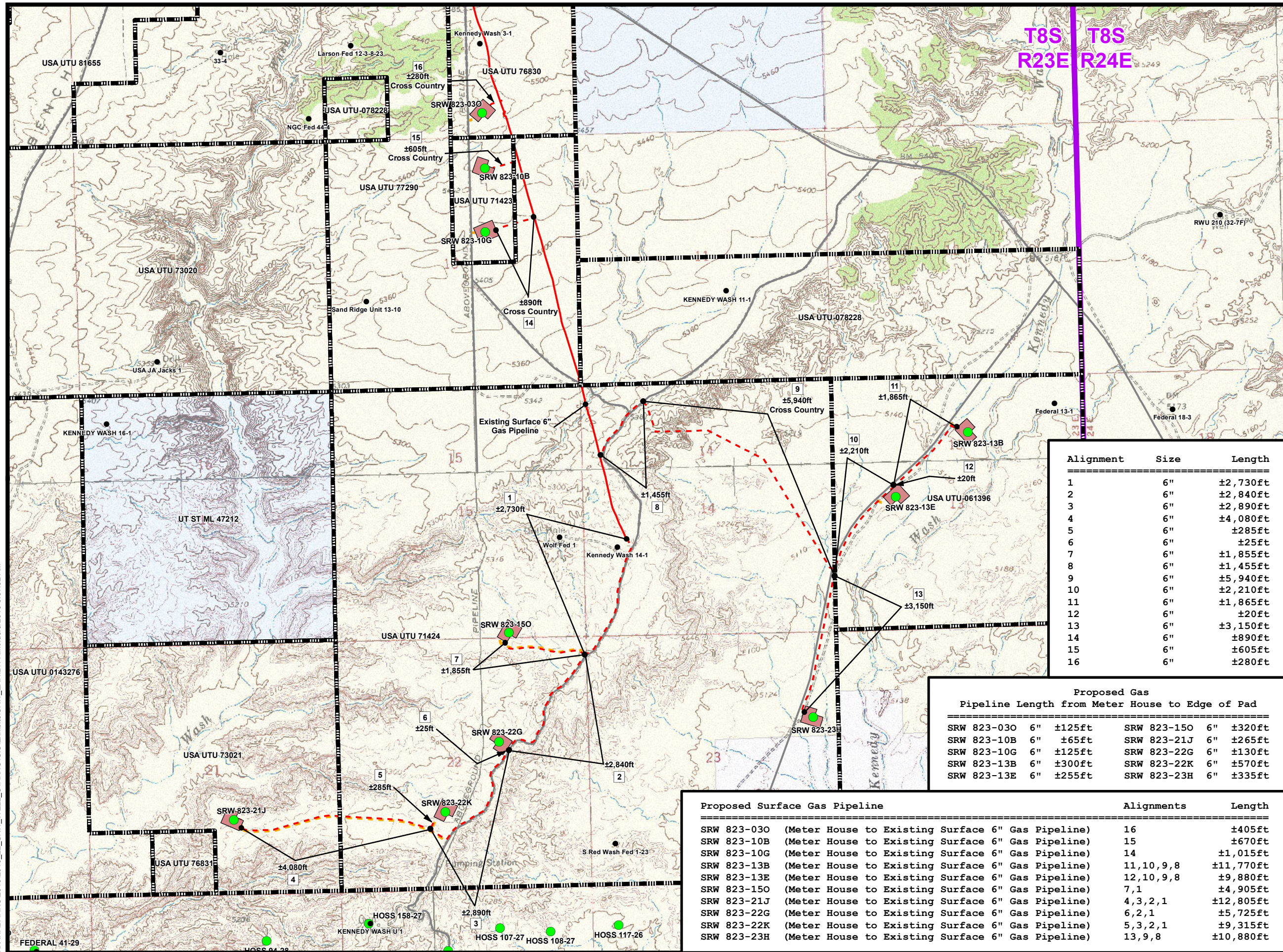
EXHIBIT C
ANADARKO COMPLETION
TRANSPORTATION SYSTEM
(ACTS) PIPELINE
LOCATED IN SECTIONS
3, 10, 13, 14, 15, 21, 22 & 23
T8S, R23E, S.L.B.&M.
UINTAH COUNTY, UTAH

NAD83 USP-Cft Scale: 1" = 2,000ft
Drawn by: TL Date: 30 Apr 2013
Revised: Date:

Note: The Anadarko Completion Transport System Consists of Two Temporary 6" Aluminum Pipelines.

Proposed ACTS Pipelines	
Line	Length
1	±1,105ft
2	±85ft
3	±1,490ft
4	±2,425ft
5	±230ft
6	±4,985ft
7	±4,685ft
8	±30ft
9	±2,870ft
10	±295ft
11	±4,120ft
TOTAL =	±22,320ft

K:\NADAR\2013\2013_22_SRW_WELL_STAKING\GIS\Exhibits\SRW_EXHIBIT A.mxd 5/9/2013 8:57:52 AM



Legend

- Well - Proposed
- Well - Existing
- Well Pad - Proposed
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Road - Proposed
- Road - Existing
- Lease Boundary
- Bureau of Land Management
- Indian Reservation
- State
- Private

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

609 Consulting, LLC
2155 North Main Street
Sheridan, WY 82801
(307) 674-0609

**MIDSTREAM EXHIBIT A
GAS GATHERING SYSTEM
FOR WELL PADS
LOCATED IN SECTIONS
3, 10, 13, 14, 15, 21, 22 & 23
T8S, R23E, S.L.B.&M.
UINTAH COUNTY, UTAH**

NAD83 USP-Cft Scale: 1" = 2,000ft

Drawn by: TL Date: 30 Apr 2013

Revised: Date:

Alignment	Size	Length
1	6"	±2,730ft
2	6"	±2,840ft
3	6"	±2,890ft
4	6"	±4,080ft
5	6"	±285ft
6	6"	±25ft
7	6"	±1,855ft
8	6"	±1,455ft
9	6"	±5,940ft
10	6"	±2,210ft
11	6"	±1,865ft
12	6"	±20ft
13	6"	±3,150ft
14	6"	±890ft
15	6"	±605ft
16	6"	±280ft

Proposed Gas Pipeline Length from Meter House to Edge of Pad					
SRW 823-03O	6"	±125ft	SRW 823-15O	6"	±320ft
SRW 823-10B	6"	±65ft	SRW 823-21J	6"	±265ft
SRW 823-10G	6"	±125ft	SRW 823-22G	6"	±130ft
SRW 823-13B	6"	±300ft	SRW 823-22K	6"	±570ft
SRW 823-13E	6"	±255ft	SRW 823-23H	6"	±335ft

Proposed Surface Gas Pipeline			Alignments	Length
SRW 823-03O	(Meter House to Existing Surface 6" Gas Pipeline)		16	±405ft
SRW 823-10B	(Meter House to Existing Surface 6" Gas Pipeline)		15	±670ft
SRW 823-10G	(Meter House to Existing Surface 6" Gas Pipeline)		14	±1,015ft
SRW 823-13B	(Meter House to Existing Surface 6" Gas Pipeline)		11,10,9,8	±11,770ft
SRW 823-13E	(Meter House to Existing Surface 6" Gas Pipeline)		12,10,9,8	±9,880ft
SRW 823-15O	(Meter House to Existing Surface 6" Gas Pipeline)		7,1	±4,905ft
SRW 823-21J	(Meter House to Existing Surface 6" Gas Pipeline)		4,3,2,1	±12,805ft
SRW 823-22G	(Meter House to Existing Surface 6" Gas Pipeline)		6,2,1	±5,725ft
SRW 823-22K	(Meter House to Existing Surface 6" Gas Pipeline)		5,3,2,1	±9,315ft
SRW 823-23H	(Meter House to Existing Surface 6" Gas Pipeline)		13,9,8	±10,880ft